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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)

Amendment of Section 73.622(b) of)
the Commission's Rules, DTV)
Table of Allotments)
(Richmond, Virginia))

MM Docket No.

RM No. RM-9865

PRM99mm

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

To: The Chief, Allocations Branch

**PETITION FOR RULEMAKING
AND REQUEST FOR EXPEDITED ACTION**

1. Central Virginia Educational Telecommunications Corporation ("CVETC"), by its attorneys and pursuant to Section 73.623 of the Commission's rules, 47 C.F.R. §73.623, hereby requests that the Commission institute a rulemaking proceeding for the purpose of amending the Table of Allotments for the digital television ("DTV") service to change the DTV channel allotment for station WCVE-DT, Richmond, Virginia, from channel *24 to Channel *42. In light of the impending May 1, 2000 deadline for CVETC to file the WCVE-DT construction permit application, CVETC respectfully requests expedited action on this Petition.

2. CVETC is the licensee of noncommercial educational television station WCVE-TV, Richmond, Virginia, which currently operates on NTSC channel *23. As the attached engineering exhibit of Cohen, Dippell and Everist, P.C. (the "Engineering Statement") indicates, the proposed channel substitution will enable CVETC to operate without the stringent DTV to lower adjacent NTSC pilot carrier offset requirements

and it will remove potential interference to and from WTVR-DT, Channel 25, Richmond, Virginia. In addition, the proposed substitution would permit CVETC to operate both WCVE-DT and WCVW-DT, Channel 44, which is also licensed to CVETC, from a common antenna and reduce intermodulation effects between local channels 22, 23, 24, 25, and 26.


3. As demonstrated in the Engineering Statement, the substitution of Channel *42 for Channel *24 at Richmond involves no change in WCVE-DT's reference coordinates. Moreover, while the proposed substitution may create additional interference to other television stations, the proposed allotment meets the Commission's *de minimis* interference criteria because the interference to those stations is less than 2%, with the aggregate interference for each station less than 10%. *See* Engineering Statement, Table III

4. Accordingly, CVETC respectfully requests that the Commission expeditiously commence a rulemaking proceeding to amend the DTV Table of Allotments to allot and assign DTV channel *42 to Richmond, Virginia (in lieu of Channel *24) for use by WCVE-DT.

Respectfully submitted,

**CENTRAL VIRGINIA EDUCATIONAL
TELECOMMUNICATIONS
CORPORATION**

By: _____


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November 5, 1999

ENGINEERING REPORT
PETITION FOR RULE MAKING
TO AMEND SECTION 73.622
OF THE FCC RULES BY SUBSTITUTING
UHF-TV DTV CHANNEL 42 FOR CHANNEL 24
AT RICHMOND, VIRGINIA

NOVEMBER 1999

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

Warren M. Powis, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer of the University of Canterbury, New Zealand, a Registered Professional Engineer in the District of Columbia, the State of Virginia, the State of South Carolina, and Vice President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005; previously employed for 15 years with the New Zealand Broadcasting Corporation; a member of the Institution of Professional Engineers New Zealand (IPENZ), the Association of Federal Communications Consulting Engineers (AFCCE), and the National Society of Professional Engineers (NSPE).

That his qualifications are a matter of record in the Federal Communications Commission;

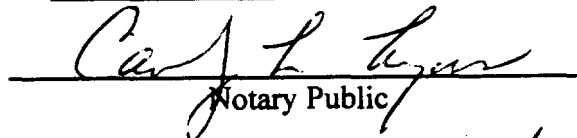
That the attached engineering report was prepared by him or under his supervision and direction and,

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.



Warren M. Powis
District of Columbia
Professional Engineer
Registration No. 8339

Subscribed and sworn to before me this 3rd day of November, 1999.


Notary Public

My Commission Expires: 2/28/2003

This engineering report has been prepared on behalf of Central Virginia Educational Telecommunications Corporation ("CVETC"), licensee of non-commercial educational television station WCVE-TV, Channel 23, Richmond, Virginia, in support of its petition for rule making to amend Section 73.622(b) of the FCC Rules and Regulations. In the original DTV Table of Allotments adopted by the Commission in Appendix B of the Memorandum, Opinion and Order on Reconsideration of the Sixth Report and Order in MM Docket No. 87-168¹, WCVE-TV was allotted UHF Channel 24 for its DTV channel at 23 Sesame Street, Richmond, Virginia. CVETC proposes to substitute Channel 42 instead of DTV Channel 24 at Richmond, Virginia, as an amendment to FCC Rule Section 73.622(b) as follows:

Richmond, Virginia

Section 73.622(b): Substitute DTV Channel 42* for Channel 24*

The reference coordinates for the proposed new allotment are unchanged:

NAD-27

North Latitude: 37° 30' 46"

West Longitude: 77° 36' 06"

Allocation Situation

Tables I and II show the allocation situation for the proposed DTV Channel 42 allotment.

It is proposed to operate the Channel 42* allotment with a non-directional ERP of 100 kW with a radiation center of 393 meters AMSL. The attached Table III shows the area and population

¹ Adopted February 17, 1998, Released February 23, 1998.

*Non-commercial educational allotment.

that may receive interference from the proposed operation. Table III indicates the potential interference population will not exceed the Commission's guidelines provided in its Public Notice dated August 10, 1998 (Additional Application Processing Guidelines for Digital Television (DTV)). Therefore, the proposed operation would not have any adverse impact on the existing analog or proposed DTV allotments.

Reasons for Channel Substitution

The proposed channel substitution will enable CVETC to operate without the stringent DTV to lower adjacent NTSC pilot carrier offset requirements and remove potential interference to and from WTVR-DT Channel 25. The proposed substitution will enable CVETC to operate its two DTV stations on channels 42 and 44 from a common antenna and reduce intermodulation effects between local channels 22, 23, 24, 25, and 26.

Accordingly, the proposed Channel 42 DTV substitution will enable CVETC to bring a new digital non-commercial television service to the Richmond area while reducing potential intermodulation interference problems. The proposed channel substitution, therefore, would serve the public interest.

COHEN, DIPPELL AND EVERIST, P. C.

TABLE I
DTV TO NTSC UHF-TV ALLOCATION SITUATION
FOR THE PROPOSED SUBSTITUTION OF DTV
CHANNEL 42* FOR CHANNEL 24* AT
RICHMOND, VIRGINIA
OCTOBER 1999

<u>Channel</u>	<u>Channel</u>	<u>Call</u>	<u>City/State</u>	<u>Geographic Coordinates</u>	<u>Separation</u>	
					<u>Actual</u> km	<u>Required</u> km
42	0	WCVE-DT Prop.	Richmond, VA	37°30'46" 77°36'06"	—	—
27	-15	WGNT	Portsmouth, VA	36°48'43" 76°27'49"	127.5	>80.5
28	-14	None within 140 km			—	>80.5
34	-8	None within 140 km			—	>80.5
35	-7	WRLH	Richmond, VA	37°30'22" 77°42'03"	8.8	<12.0
38	-4	None within 140 km			—	>80.5
39	-3	None within 140 km			—	>80.5
40	-2	None within 140 km			—	>80.5
41	-1	WHTJ	Charlottesville, VA	37°58'58" 78°29'00"	93.6	>106.0
42	0	WVPY	Front Royal, VA	38°57'36" 78°19'52"	172.9	217.3
43	+1	WVBT	Virginia Beach, VA	36°49'14" 76°30'41"	123.6	>106.0
44	+2	None within 140 km			—	>80.5
45	+3	None within 140 km			—	>80.5
46	+4	None within 140 km			—	>80.5
49	+7	WPXV	Norfolk, VA	36°48'32" 76°30'13"	—	>80.5
50	+8	None within 140 km			—	>80.5

COHEN, DIPPELL AND EVERIST, P. C.

TABLE II
DTV TO DTV UHF-TV ALLOCATION SITUATION
FOR THE PROPOSED SUBSTITUTION OF DTV
CHANNEL 42* FOR CHANNEL 24* AT
RICHMOND, VIRGINIA
OCTOBER 1999

<u>Channel</u>	<u>Channel</u>	<u>Call</u>	<u>City/State</u>	<u>Geographic Coordinates</u>	<u>Separation</u>	
					<u>Actual km</u>	<u>Required km</u>
42	0	WCVE-DT	Richmond, VA	37°30'46" 77°36'06"	-	-
41	-1	WVEC-DT	Hampton, VA	36°49'00" 76°28'05"	126.9	110.0
42	0	WMPT-DT	Annapolis, MD	39°00'36" 76°36'33"	187.5	217.3
42	0	WRAY-DT	Wilson, NC	35°49'53" 78°08'50"	192.9	217.3
43	+1	WPXW-DT	Manassas, VA	38°47'16" 77°19'49"	143.5	110.0

COHEN, DIPPELL AND EVERIST, P. C.

TABLE III
INTERFERENCE ANALYSIS
WCVE-DT, CHANNEL 42, RICHMOND, VIRGINIA
OCTOBER 1999

A study of predicted interference caused by the proposed WCVE-DT service has been performed using a version of the Longley-Rice program as described in OET Bulletin No. 69 (July 2, 1997) and the Public Notice, "Additional Application Processing Guidelines for Digital Television (DTV)" (August 1998). The FCC's FORTRAN-77 code was modified only to the extent necessary (primarily input/output handling) for the program to run on a Windows98/Intel platform. Comparison of service/interference areas and populations indicates that this model closely matches the FCC's evaluation program. Best efforts have been made to use data and calculations identical to the FCC's program. Any slight differences are attributable to compiler, operating system and/or processor characteristics. The effect of any variance in calculated population values versus the FCC's program is minimized when differencing a given model's results, e.g., new interference equals total interference less baseline interference. The effect is further reduced for ratios of calculated population values, e.g., incremental population affected as a percent of total population served. The model employs the Longley-Rice propagation methodology and evaluates in grid cells of approximately 4 km² using 3-second terrain data sampled approximately every 0.1 km at one degree azimuth intervals with 1990 census centroids.

Baseline WCVE-DT: Allotment, Ch. 24, 108.8 kW, 327 meters HAAT, 37°30'45" N.Lat., 77°36'05" W.Long. (NAD-27)

Proposed change: Non-directional, Ch. 42, 100 kW, 395.3 meters HAAT, 37°30'45" N.Lat., 77°36'05" W.Long (NAD-27)

<u>Affected Station:</u>	<u>Appendix B</u>	<u>Distance/Bearing</u>	<u>Interference (% of Population Served)</u>	
			<u>Baseline</u>	<u>New</u>
WVPY-TV, Channel 42, Front Royal, VA Licensed, 141 kW, 399 meters HAAT	1.8% new interference	172.9 km/338.6°	1.4%	0.2%
WRAY-DT, Channel 42, Wilson, NC Allotted, 75.4 kW, 539 meters HAAT	100.0% area match	192.8 km/194.8°	0.4%	0.3%
WMPT-DT, Channel 42, Annapolis, MD Allotted, 349.5 kW, 265 meters HAAT	95.4% area match	187.5 km/27.2°	4.8%	0.1%